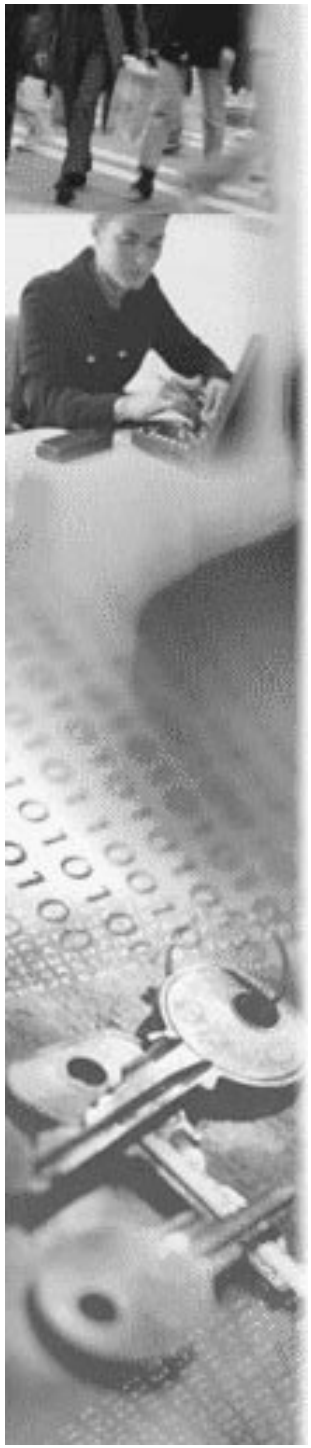

Forward
Entrust®
TECHNOLOGIES
We Bring Trust to e-Business™



Entrust TECHNOLOGIES

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ENTRUST SecureControl™

Product Overview

Allan MacPhee

ENTRUST SecureControl™

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Entrust/SecureControl™ is a role and rule-based privilege management solution for both Web and non-Web applications

Entrust/SecureControl manages fine grained authorization to Web pages (URL's), objects within a Web page, and to Client/Server applications

Why Entrust/SecureControl?

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Web Single Sign On

- SSO for the Web across multiple authentication types

One to One Marketing

- Deliver personalized content targeted to each user

Web Portals

- Users only see the applications they can access

Privacy of Partner/Customer Relationships

- Admin hierarchies ensure privacy of information

Multiple Authentication Types

- Specify the authentication type per resource/application

Why Entrust/SecureControl?

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Reduced Administration Costs

- With SSO, centralized policies, and Role/Rules support

Improved Corporate Security

- Centralized, consistent enterprise wide security policies

Eliminate Admin Bottlenecks

- Distribute and delegate admin responsibility

Single Point of User Enrollment and Management

- LDAP replication of E/PKI users into E/SC

Integration with best in class PKI

- Supports E/Direct, E/Unity, E/Web Connector, Entrust.net, CRL checking

Why Entrust/SecureControl?

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Leverage existing Entrust relationship

- Single point of contact for a complete enterprise wide security solution supported by proven, experienced Tech Support and SI teams

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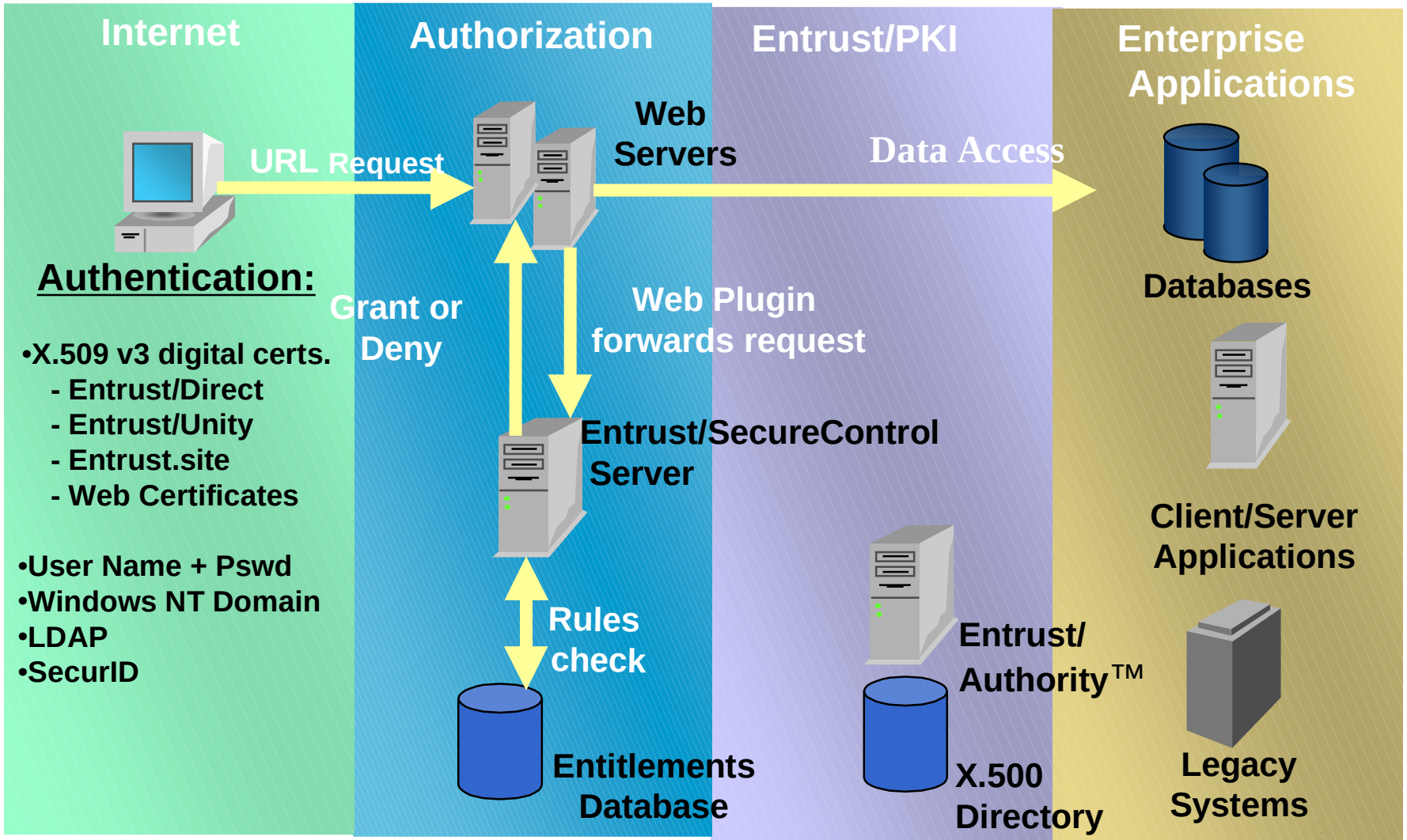
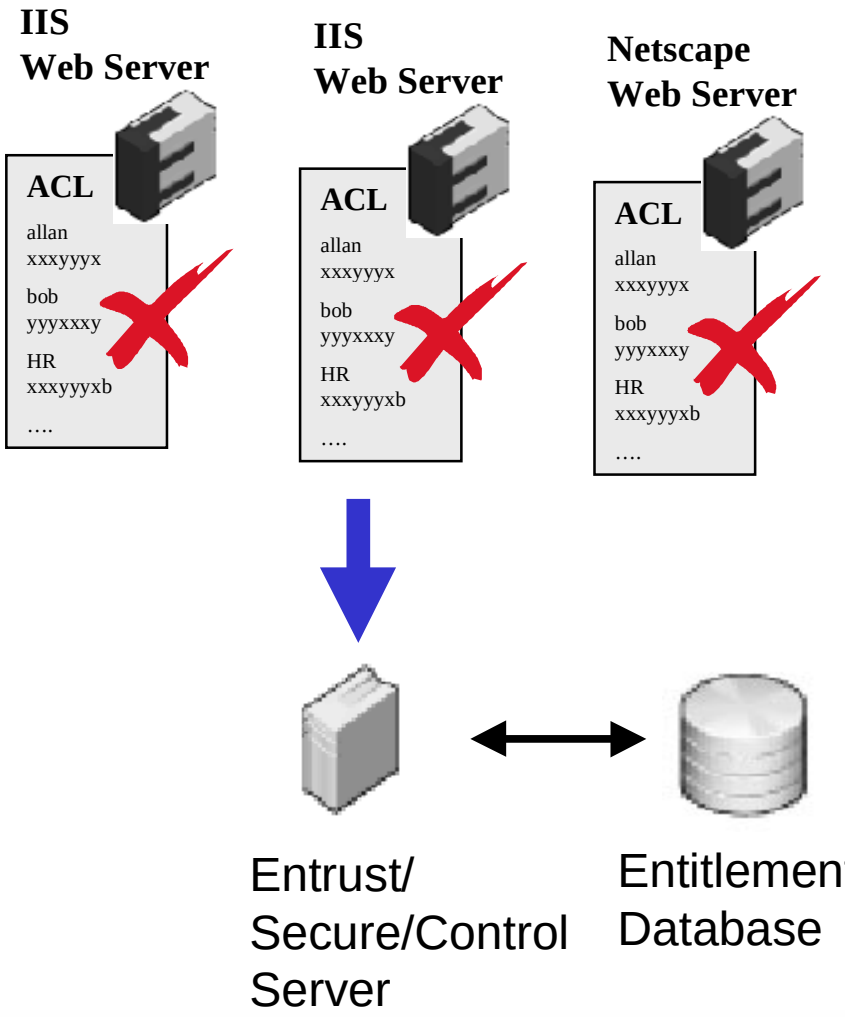
Entrust/SecureControl™ in Action!



Improving the Web Security model



Current Web Security Deficiencies

- **No Single Sign On**
- **Manually managing ACL's at each Web server**
- **ACL's do not scale - User centric security model**
- **ACL's have a size limitation**
- **ACL management different for IIS and Netscape**
- **Point solution - Web only model**

Entrust/SecureControl Benefits

- **Single Sign On for the Web**
- **Role/Rules scalable privilege management**
- **Centralized, consistent security policy for all Web servers**
- **Cross-platform support - NT and Solaris**
- **Deliver personalized content to users**
- **Distribute and delegate Admin responsibilities**
- **Centralized Auditing**

Improving Application Security

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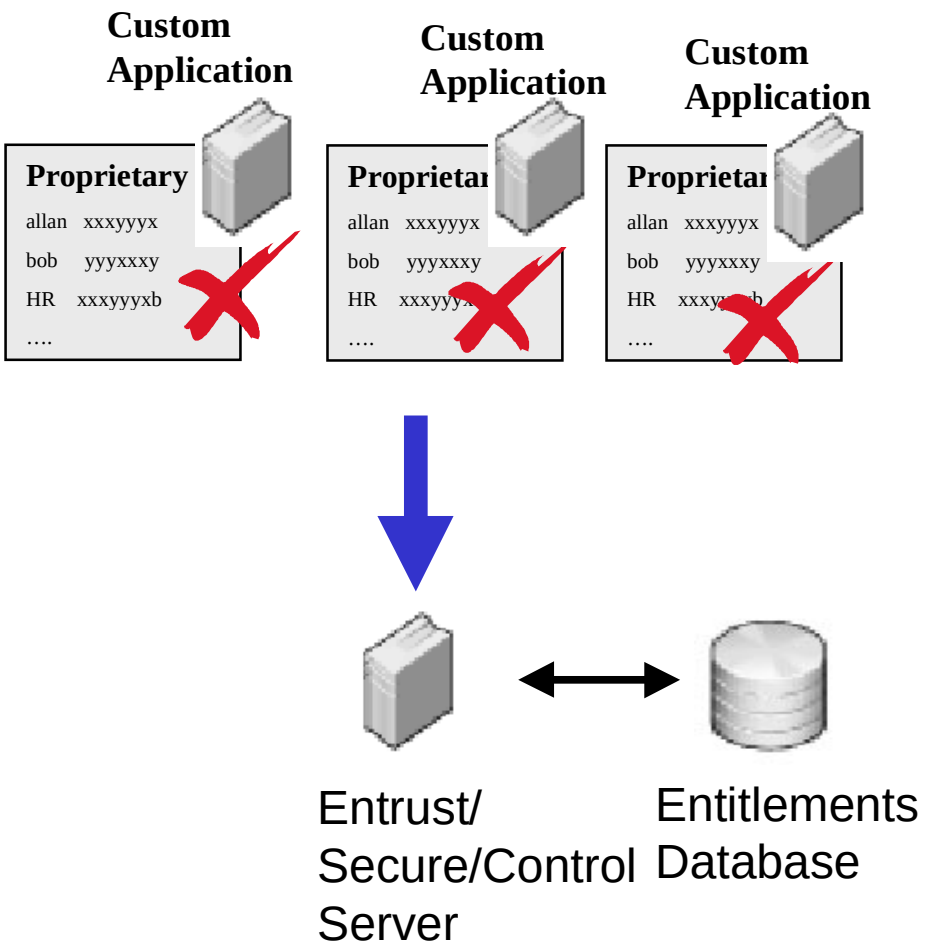

Application Specific Security Deficiencies

- **No Single Sign On**
- **Inconsistent authentication policies**
- **Inconsistent security policy across applications**
- **Changes to security policy means re-coding the application**
- **Cannot distribute and delegate Admin responsibilities**
- **Latency involved in implementing changes in security policy**

Entrust/SecureControl Benefits

- **Leverage Entrust Single Login across all applications**
- **Centralized, consistent security policy for all applications**
- **Cross-platform support - NT and Solaris**
- **Security policy changes active immediately without re-coding the application**
- **Distribute and delegate Admin responsibilities**
- **Centralized Auditing**

Single Sign On for the Web

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- Transparent user access to different Web servers within the Web site via an encrypted cookie
- 3xDES encrypted cookie contains: IP address, user ID, cookie lifetime, cookie idle time, and authentication type
- No additional client-side software required
- Enable Single Sign On for non-Web applications by making the applications Entrust-Ready™

Scalable Administration

- Create Virtual Business Units (VBUs) (admin domains) to ensure administrative privacy between business units
- VBUs enable the distribution of administrative responsibilities to the local resource owners
- Delegation of administrative responsibilities into sub-administrative roles such as IT helpdesk staff is capable of resetting passwords only
- Resource Centric model, security policy administration is independent from the number of users
- Security policy defines the requirements to gain access on a per resource basis - as granular as required (Dir, file, object level)

Security Policy

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- Support for both an ACL and Role & Rule authorization model
- SmartRules enable automated and dynamic authorization decisions based upon:

Resource to be accessed + User ID + User properties

- User properties are custom definable (role, location, security level, project, account balance, etc.)
- User property operators include: Boolean, Float, Integer, Strings, and Date
- Flexible and intuitive rules language allows rules to be concatenated creating chains of criteria

Where can Privilege Management be implemented?

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✓	**Web Server (page level)**	Web Plugin
✓	**Applications (object/transaction)**	E/SC API
✗	Database (row level locking)	NO
✗	OS / File System level	NO

3 Ways to Add Privilege Management

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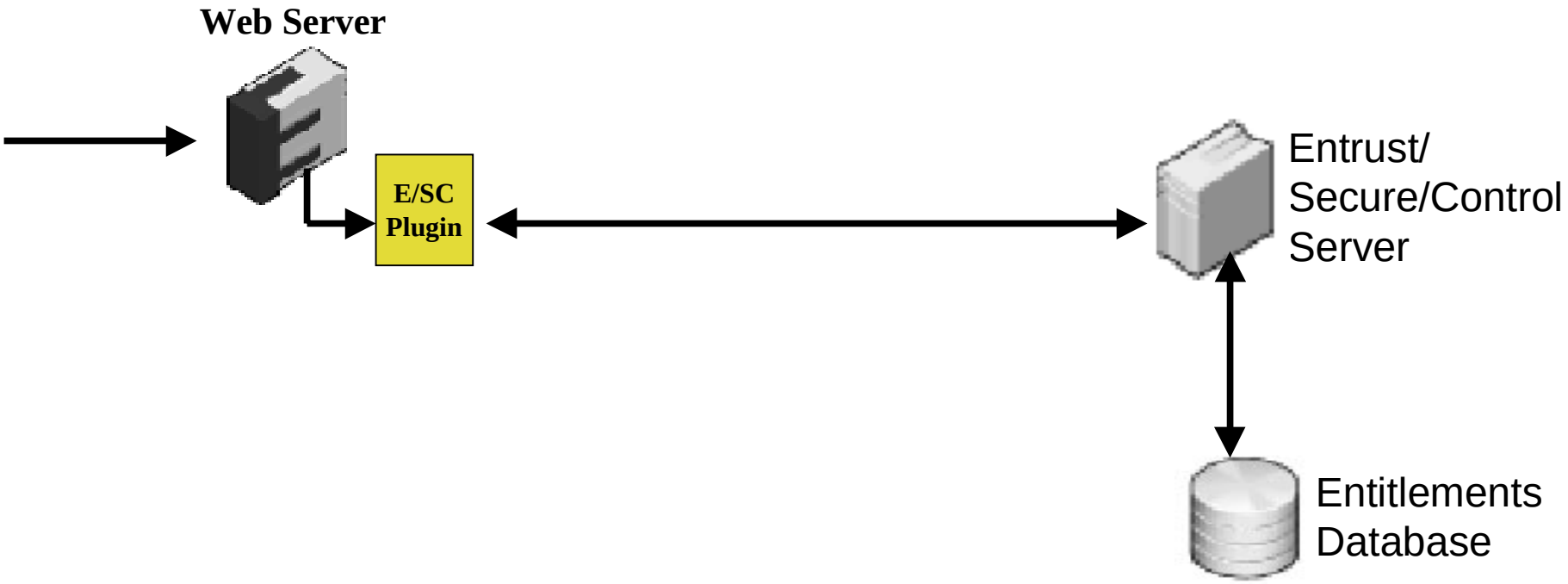
Option 1 - Install a Plugin at the Web server [URL level]



3 Ways to Add Privilege Management

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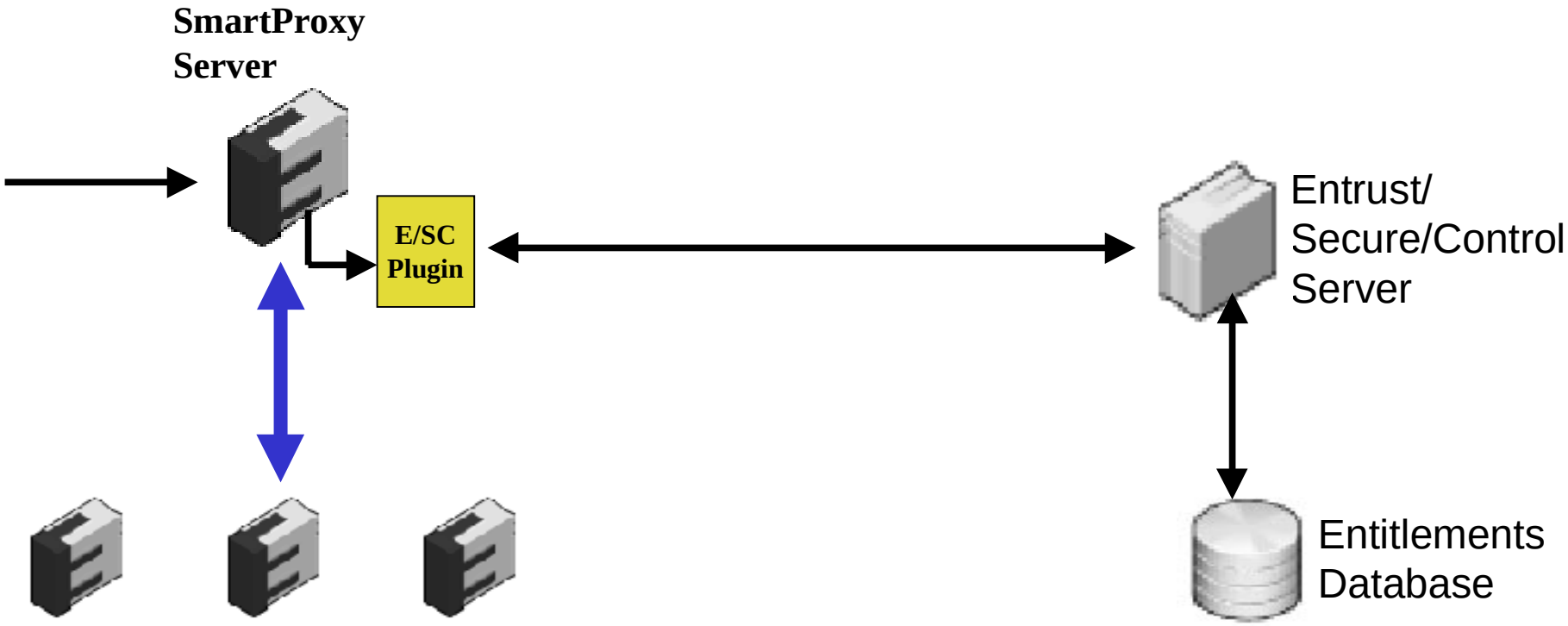
Option 2 - Install a Netscape Proxy Server and protect all http traffic [URL level**]**



3 Ways to Add Privilege Management

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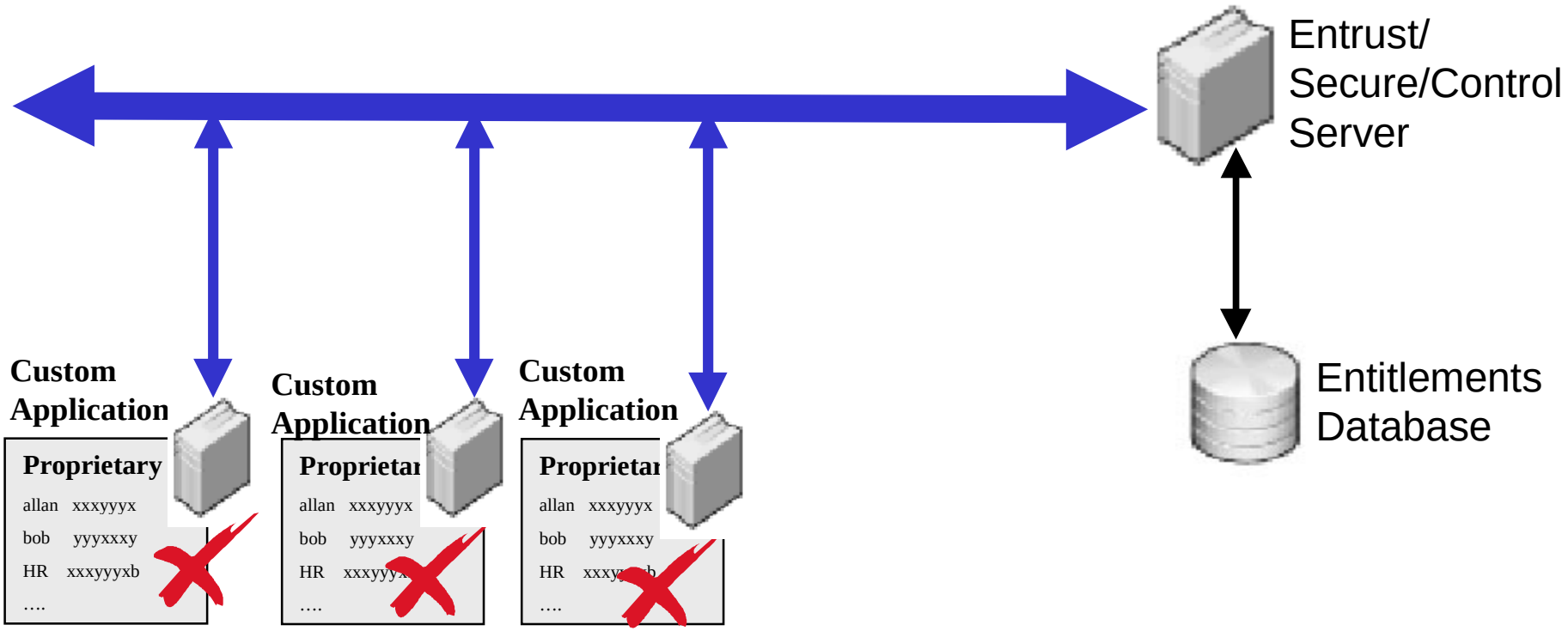
Option 3 - Integrate the E/SC API into the custom application [Object level**]**



Support Authentication Mechanisms

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- Authentication types supported:
  - X.509 v3 Digital Certificates
  - Username/ passwords
  - NT logins
  - SecurID
  - LDAP passwords
  - Custom Forms
- Protect portions of the Web site with different authentication mechanisms
- Authentication mechanisms can be chained for transparent user navigation of the Web site
- Self registration Web interfaces are also available

Entitlements Database

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- Oracle [NT 4.0, Solaris 2.6]
- Sybase [Solaris]
- Stores the following information:
  - Resource definitions
  - User Ids
  - User properties
  - User account information
  - User passwords (hashed with MD5)
  - Security policy

User & User Property Enrollment

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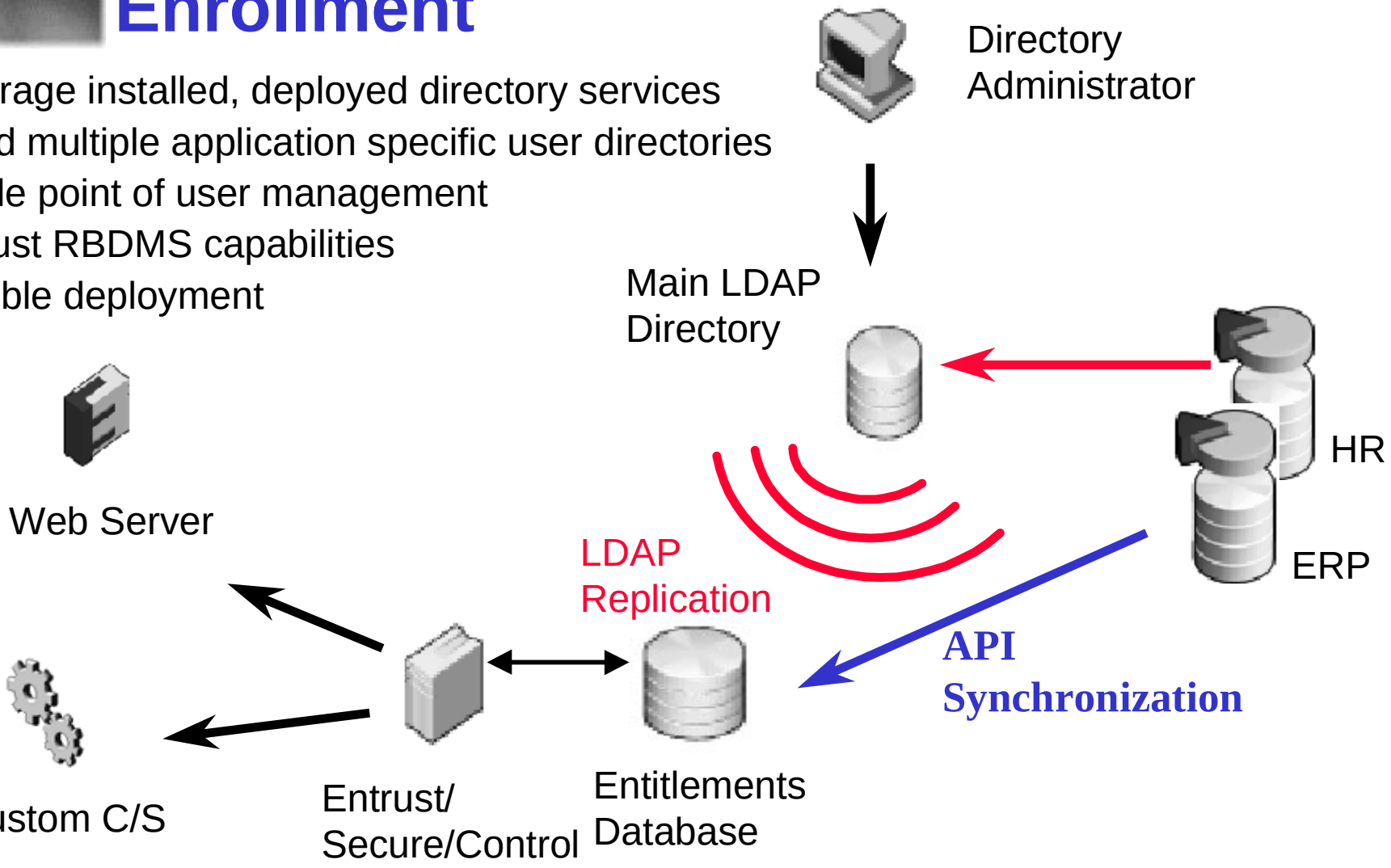
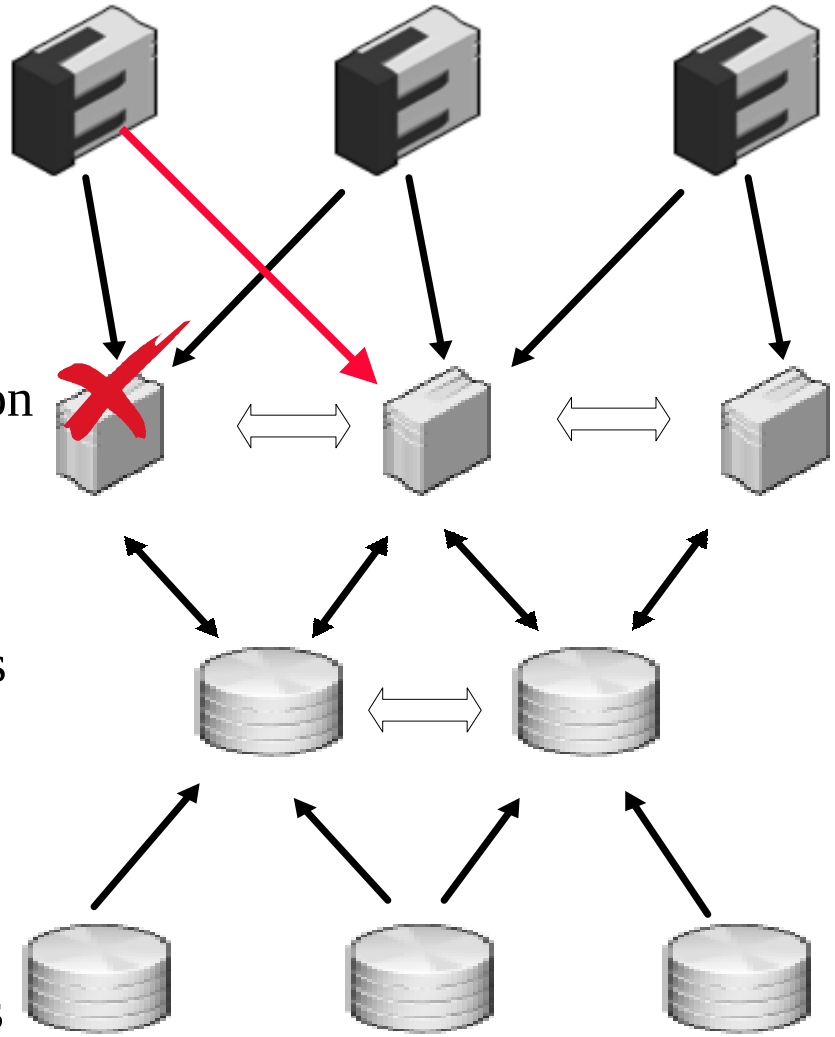
- Leverage installed, deployed directory services
- Avoid multiple application specific user directories
- Single point of user management
- Robust RBDMS capabilities
- Flexible deployment



Architecture Overview



- Java/CORBA based distributed Architecture
- Web servers access policy from cluster of Authorization servers
- Plug-in will fail-over to surviving Authorization Server automatically
- Round robin load balancing
- Event notification alerts admin to failure

Entrust/PKI Integration

- Entrust/SecureControl complements the following Entrust products:
  - Entrust/Direct™
  - Entrust/Unity™
  - Entrust/Web Connector™
  - Entrust.net™
  - Entrust/Session™ Toolkit integration

Platform Support

- Entrust/SecureControl Server
  - NT 4.0
  - Solaris 2.6
- Web Servers
  - Netscape Enterprise Server
  - Microsoft IIS
  - SmartProxy Server
- Entrust/SecureControl API
  - C, Java, COM
- LDAP Replication Tool (Java)

Entrust and Attribute Certificates ...

- Attribute Certificates support today in Entrust/PKI
  - FPKI certificate compliance is a client side setting that is stored in an Attribute Certificate and enforced by client side software
- Attribute Certificate support in Entrust/SecureControl
  - Entrust/SecureControl will store user information as Attribute Certificates in the Directory and make privilege management decisions based upon this information
  - Applications themselves will be able to use the Entrust/SecureControl API to utilize user Attribute Certificates directly

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Product Availability

- Commercially available on Windows NT 4.0 and Solaris 2.6

- For more information, visit our Web site at

www.Entrust.com

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